

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

Date of Report: 04/03/98

Date Received: 03/24/98

Project: Percentage of Acid, PO# M10463

Date Analyzed: 03/27/98

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES  
FOR % ACID**

Results Reported as Percent Acid by Volume

<u>Sample ID</u>	<u>% Acid</u>
M10463 A Small Tank	7.0
M10463 B Large Tank	11

**FRIEDMAN & BRUYA, INC.**

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**ENVIRONMENTAL CHEMISTS**

**Date of Report: 04/03/98**

**Date Received: 03/24/98**

**Project: Percentage of Acid, PO# M10463**

**Date Extracted: 03/27/98**

**Date Analyzed: 04/02/98**

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES  
FOR SPECIFIC GRAVITY  
@ 15.56 °C**

<u>Sample ID</u>	<u>Specific Gravity</u>
M10463 A Small Tank	1.20
M10463 B Large Tank	1.26
Method Blank	1.00

**FRIEDMAN & BRUYA, INC.**

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**ENVIRONMENTAL CHEMISTS**

**Date of Report: 04/03/98**

**Date Received: 03/24/98**

**Project: Percentage of Acid, PO# M10463**

**Date Extracted: 03/31/98**

**Date Analyzed: 03/31/98**

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES  
FOR TOTAL METALS BY  
INDUCTIVELY COUPLED PLASMA (ICP)  
(METHOD 6010)**

**Results Reported as mg/L (ppm)**

<u><b>Sample ID</b></u>	<u><b>Total Iron</b></u>
<b>M10463 A Small Tank</b>	<b>51,000</b>
<b>M10463 B Large Tank</b>	<b>56,000</b>
<b>Method Blank</b>	<b>&lt;20</b>

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**Date of Report: 04/03/98**

**Date Received: 03/24/98**

**Project: Percentage of Acid, PO# M10463**

**QUALITY ASSURANCE RESULTS  
FOR SPECIFIC GRAVITY**

**Laboratory Code: 803055-01 (Duplicate)**

<b>Analyte</b>	<b>Sample Result</b>	<b>Duplicate Result</b>	<b>Relative Percent Difference</b>	<b>Acceptance Criteria</b>
<b>Specific Gravity@ 15.56°C</b>	<b>1.08</b>	<b>1.09</b>	<b>1</b>	<b>0-20</b>

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

Date of Report: 04/03/98

Date Received: 03/24/98

Project: Percentage of Acid, PO# M10463

**QUALITY ASSURANCE RESULTS  
FOR TOTAL METALS BY  
INDUCTIVELY COUPLED PLASMA (ICP)  
(METHOD 6010)**

Laboratory Code: 803112-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Iron	mg/L (ppm)	51,000	47,000	8	0-20

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	% Recovery LCS	% Recovery LCSD	Acceptance Criteria	RPD
Iron	mg/L (ppm)	10	99	103	80-120	4

803112

FRIEDMAN & BRUYA, INC.  
 3012 16th Avenue West  
 Seattle, WA 98119-2029  
 (206) 285-8282

CF AI 3/24/98  
 MM

# SAMPLE CHAIN OF CUSTODY

Send Report To: Alaska Copper Works Contact: Gerard Thompson  
 Company: CDO Alaska ST  
 Address: 382-8789  
 City, State, Zip: Seattle WA  
 Phone #: (206) 382-8789 FAX #: (206) 382-4709 Date: 3-24-98

SITE NO.	PROJECT NAME	PURCHASE ORDER #
7238	% of Acid	M10463
SAMPLERS (signature)		PROJECT LOCATION
		3200 6th Ave S.
REMARKS		SAMPLE DISPOSAL INFORMATION
		<input checked="" type="checkbox"/> Dispose after 30 days <input type="checkbox"/> Return Samples <input type="checkbox"/> Call for Instructions

Sample #	Date/Time Sampled	Type of Sample	# of Jars	Lab Sample #	Analyses Requested
M10463A S. Tank	3/24/98 8:15	HNO3	1	01	% of Acid, SG, FE
M10463B EG TANK	3/24/98 8:15	HNO3	1	02	% of Acid, SG, FE

SIGNATURE	PRINT NAME	COMPANY	Date	Time
Relinquished by:	GERARD THOMPSON	ACW	3/24/98	8:50
Received by:	Sgt GORMLEY	FBI	3/24/98	9:30
Relinquished by:				
Received by:				

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D.  
Charlene Jensen, M.S.  
Bradley T. Benson, B.S.  
Kurt Johnson, B.S.

3012 16th Avenue West  
Seattle, WA 98119-2029  
TEL: (206) 285-8282  
FAX: (206) 283-5044  
e-mail: fbi@isomedia.com

April 3, 1998

**DUPLICATE COPY**

**INVOICE #98ACU0403-1**

Accounts Payable  
Alaskan Copper Works  
628 South Hanford St.  
Seattle, WA 98134

RE: Project Percentage of Acid, PO# M10463: Results of testing requested  
by Gerry Thompson for material submitted on March 24, 1998.

2 water samples analyzed for percentage of Acids @ \$25 per sample	\$ 50.00
2 water samples analyzed for Specific Gravity @ \$25 per sample	50.00
2 water samples analyzed for Iron using Method 6010 @ \$35 per sample	<u>70.00</u>
Amount Due .....	\$ 170.00

FEDERAL TAX ID (b) (6)

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.  
Charlene Jensen, M.S.  
Bradley T. Benson, B.S.  
Kurt Johnson, B.S.

3012 16th Avenue West  
Seattle, WA 98119-2029  
TEL: (206) 285-8282  
FAX: (206) 283-5044  
e-mail: fbi@isomedia.com

April 3, 1998

Gerry Thompson, Project Manager  
Alaskan Copper Works  
628 South Hanford St.  
Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on March 24, 1998 from your Percentage of Acid, PO# M10463 project.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Manuel Marti  
Project Manager

Enclosures  
ACU0403R.DOC